# SEA TURTLES ROUND TASMANIA

THE FIRST RECORD OF THE GREEN TURTLE CHELONIA MYDAS (LINNE, 175B)

AND THE HAWKSBILL TURTLE ERETMOCHELYS IMBRICATA BISSA (RUPPELL, 1835)

FROM TASMANIAN WATERS

bу

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Manuscript received 10/12/1970

Published 21/5/1971

#### ABSTRACT

A large *Chelonia mydas* (Linné, 1758) was caught on a hand line at Burnie, north-west Tasmania on 20 April 1959 but because of mistaken identity, the record remained obscure.

A small Eretmochelys imbricata bissa (Rüppell, 1835) was found dead on a beach on King Island, Bass Strait in December 1969. These two occurrences constitute the first records of the species from Tasmania and, as such, are probably the most southerly distributional record.

Scott and Mollison (1956) record the occurrence in Tasmanian waters of the leathery turtle <code>Dermochelys coriacea</code> (Linné, 1766) twice and the loggerhead turtle <code>Caretta caretta gigas Deraniyagala</code>, 1933 eleven times. Five additional occurrences of <code>Dermochelys coriacea</code> are recorded here.

## INTRODUCTION

Specimens of chelonia are rarely collected from Tasmania though fishermen occasionally see them at sea. Lord and Scott (1924) record the first, a leathery turtle <code>Dermochelys coriacea</code>, secured in Fortescue Bay on the southeast coast of Tasmania in March 1889. Scott and Mollison (1956) recorded a sight record of this species from the same locality about 1945 and the occurrence of the <code>Indo-Pacific</code> redbrown loggerhead turtle <code>Caretta caretta gigas</code> based upon the examination of three specimens and the reported sightings of eight others.

Nishimura (1967) does not recognise subspecific separation of Caretta caretta gigas as suggested by Deraniyagala (1933) and accepted by many authors, including those who have recorded loggerheads from Tasmania. Caretta caretta occurs typically in the temperate zones of both hemispheres, being replaced in subtropical zones by the olive loggerhead turtle Lepidochelys olivacea Eschscholtz, 1829.

## CHELONIA MYDAS (LINNE, 1758)

The Tasmanian daily newspaper, "The Advocate" of 21 April 1959 published a photograph of a large turtle and some accompanying text stating that the turtle was hooked by Mr. Dick Austin on the previous day while he was fishing "for trevally" with a light nylon line from Ocean Pier at Burnie (land district of Wellington/Devon). The turtle was reported to have "snapped up the bait" and, after a rope was attached, it was hauled to the wharf

by six men. There it was photographed and assessed to weigh 500 pounds (227  $\,\mathrm{kg}$ .) and to measure five feet six inches in length (1676 mm). It was stated to nave "wasted no time in getting under way again when he was thrown back into the sea."

It was identified then as a leathery turtle and this mistake remained unnoticed until 1970 when, in files in the Queen Victoria Museum, I found the newspaper cutting. After careful examination of several excellent photographs kindly provided by the Assistant Manager of "The Advocate," I am confident in identifying it as a green turtle Chelonia mydas. This opinion is supported by Dr. H. G. Cogger, Curator of Reptiles and Amphibians of the Australian Museum, Sydney who, after examining one of the photographs, wrote "The turtle shown in the photograph is almost certainly a Green Turtle (Chelonia mydas). Its long tail would suggest that it was a male."

This constitutes the first recorded occurrence of the species in Tasmania and probably the most southerly record. McCann (1966) records its occurrence in New Zealand on five occasions but all were from more northerly latitudes.

# ERETMOCHELYS IMBRICATA BISSA (RUPPELL, 1835)

In December 1969 a turtle in an advanced state of decomposition was collected on a beach at Long Point, Whitemark, Flinders Island, Bass Strait by Constable Reg Chatwin. He cleaned away as much of the body as possible and allowed the united carapace and plastron to dry. This was forwarded to the Queen Victoria Museum on 25 June 1970 where it was determined as a hawksbill turtle <code>Eretmochelys imbricata</code> and deposited in the collection (register number 1970/3/9). This is the first record of the species from Tasmanian waters and probably its most southerly record.

Gadow (1958) gives its distribution as "all the tropical and subtropical seas." Worrell (1963) states "Occurs in shallow coastal waters as far south as Broken Bay, where I have collected occasional specimens, to southern New South Wales. Turtles of all kinds, however, are rare south of the torrid zone."

Gadow (1958) gives the largest shell recorded as measuring 850 mm. in length. Pritchard (1969) gives 33.1 inches (838 mm.) as the mean carapace length of nesting hawksbill turtles on Guvana and the heaviest specimen he weighed was 165 pounds (74.47 kg).

The overall measurements of the dried carapace of the Flinders Island specimen are 330 mm. length and 260 mm. width. It is distorted slightly by an old wound suggesting the bite of a predator. This has resulted in the fifth and sixth margin epidermal plates being missing and the fourth and seventh damaged. The wound had completely healed and does not appear to have been the cause of death.

McCann (1966) gives three records from New Zealand.

### DERMOCHELYS CORIACEA (LINNE, 1766)

1. On 5 April 1957 a female specimen was collected at sea off Bridport (land district of Dorset) by Messrs. N. & R. Lade and brought to Bridport where it was transported to the Queen Victoria Museum. Its overall length was about five feet (1524 mm.) and its weight about 850 pounds (385.7 kg). The skeletal remains are held in the Queen Victoria Museum (register number 1970/3/11). At least three turtles were reported to have been seen off Brid-

port in the weeks previous to its capture.

- 2. On 14 January 1969 Mr. Jack Mallison found a large turtle entangled in his fishing net offBinnalong Bay (land district of Dorset). It was nearly dead and was shot to facilitate its disentanglement. Several photographs were taken by Mrs J. Kerr who kindly allowed me to view them, providing confirmation of Mr. Mallison's identification as Dermochelys coriacea. Shortly afterwards it washed up on Binnalong Bay beach.
- 3. On 13 February 1959 a note in the Tasmanian daily newspaper "The Examiner" reported the presence of a dead turtle on the beach near Denison River at Bicheno (land district of Glamorgan). It was stated to be approximately five feet six inches (1676 mm.) long and three feet six inches (1067 mm.) wide. Mr. E. O. G. Scott visited the site on the following two days and was informed that it had been there for at least two weeks. He identified it as Dermochelys coriacea and buried the remains in the sand to recover the bones later.
- 4. Professor B. H. Brattstrom of California State College has kindly provided me with the following information. On or about 29 November 1966 a large Dermochelys coriacea was killed by fishermen and brought to the rocks at Killiecrankie Bav, Flinders Island, Bass Strait, after it had become entangled in fishing gear and buoy lines. Professor Brattstrom inspected it on 3 December 1966, took photographs, collected barnacles from its back and removed its head for the skull which is now lodged in the Californian State Fullerton Collection (register number 4237). He estimated the carapace as about five feet (1524 mm.) long.
- 5. On 20 February 1969 Mr. R. L. James, writing in "Letters to the Editor" in the Tasmanian daily newspaper "The Examiner" stated "A very large (and very dead) turtle has been washed up on the beach at Four Mile Creek, about four miles (6.44 km.) south of Falmouth" (land district of Cornwall). Three days later, Mr. E. O. G. Scott, Honorary Ichthyologist, Queen Victoria Museum, visited the site and identified the remains as those of Dermochelys coriacea. The head was missing and the remains were in a rather advanced stage of decomposition. It had been stranded a little above normal high tide level. Scott noted the carapace as 1330 mm. in length and 800 mm. in width. He salvaged some flipper bones and these have been deposited in the Queen Victoria Museum collection (register number 1969/3/9).
- 6. On 22 March 1969 a male Dermochelys coriacea was collected seven miles (11.26 km.) north from Stanley (land district of Wellington) by Mr. Vic. Hardy after it became entangled in shark line. It was towed to Stanley from where it was transported to the Queen Victoria Museum. Its overall length was about seven feet six inches (2286 mm.) and its weight about 900 pounds (409 kg).

This specimen has been moulded and cast in fibre glass for display in the Museum. The skeletal remains were preserved and deposited in the Museum collection (register number 1970/3/12).

McCann (1966) gives nine recorded occurrences from New Zealand.

## CARETTA CARETTA GIGAS DERANIYAGALA, 1933

Scott and Mollison (1956) include a footnote without details, mentioning a turtle, believed to be this species, found in 1951 on King Island, Bass Strait but which came to their notice too late to be incorporated in the text of their paper.

The following extract, published in the Tasmanian daily newspaper "The Mercury" on 12 March 1951 probably refers to this turtle: "A King Island fisherman found a huge sea turtle tangled in the buoy line of one of his crayfish pots on Saturday. King Island residents estimate it weighed about a ton (1019.2 kg.), and measured about six feet (1829 mm.) long by four feet (1219 mm.) wide. The fisherman (Mr. S. Darby) found the turtle caught by the neck and front flippers. He took the line aboard his boat, Pattina, and towed the turtle to Currie Harbour where residents used a motor truck to pull it onto the beach. Fishermen killed the turtle and cut it up for fish bait. The turtle is the biggest King Island residents remember.

A turtle caught off New Year Island a few years ago was not as big."

I have been unable to find any further reference to the last mentioned turtle. The location is off the east coast of King Island.

McCann (1966) gives six occurrences from New Zealand.

### COMMENTS

It is noteworthy that, with the exception of no. 4, all Dermochelys coriacea for which data are available have been recorded in or near the month of March. Of the eleven occurrences in New Zealand (McCann, 1966) seven were within the period January to May and one in October. The remaining three are undated.

This bias is only slight for the other species. It is also of interest that, of the twelve records given by Scott and Mollison (1956) covering the period 1945-1955, eleven were of Caretta caretta and one of Dermochelys coriacea. Since August 1955, there have been no records of Caretta caretta from Tasmania, but five Dermochelys coriacea were collected in the period 1957 - 1969. McCann (1966) gives five records of Caretta caretta from New Zealand during the eight years 1949 to 1956 but no subsequent occurrences.

#### ACKNOWLEDGEMENTS

Grateful acknowledgement is made to Mr. W. J. Harris, Assistant Manager of "The Advocate," Burnie for providing the photographs of *Chelonia mydas* and to Mr. E. O. G. Scott, Honorary Ichthyologist, Queen Victoria Museum, for his field notes, advice and assistance.

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